
Consumer Health Information for Asians (CHIA): a collaborative project*†

By Deborah D. Halsted, M.L.S., M.A.

deborahh@library.tmc.edu

Director of Library Operations

Beatriz Varman, M.L.I.S.

beatrizv@library.tmc.edu

Assistant Director of Public Affairs

Marsha Sullivan, M.L.S.‡

marsha.sullivan2@med.va.gov

Consumer Health Librarian

Houston Academy of Medicine-Texas Medical Center Library

Houston, Texas

Lynne Nguyen, M.P.H.

lhnghuyen@mdanderson.org

Vice President

Asian American Health Coalition

Houston, Texas

According to the 2000 United States Census, the Asian population in Houston, Texas, has increased more than 67% in the last ten years. To supplement an already active consumer health information program, the staff of the Houston Academy of Medicine-Texas Medical Center Library worked with community partners to bring health information to predominantly Asian neighborhoods. Brochures on health topics of concern to the Asian community were translated and placed in eight informational kiosks in Asian centers such as temples and an Asian grocery store. A press conference and a ribbon cutting ceremony were held to debut the kiosks and to introduce the Consumer Health Information for Asians (CHIA) program. Project goals for the future include digitizing the translated brochures, mounting them on the Houston HealthWays Website, and developing touch-screen kiosks. The CHIA group is investigating adding health resources in other Asian languages, as well as Spanish. Funding for this project has come from outside sources rather than from the regular library budget.

INTRODUCTION

Houston, Texas, is the fourth largest city in the nation, with nearly two million residents in the city

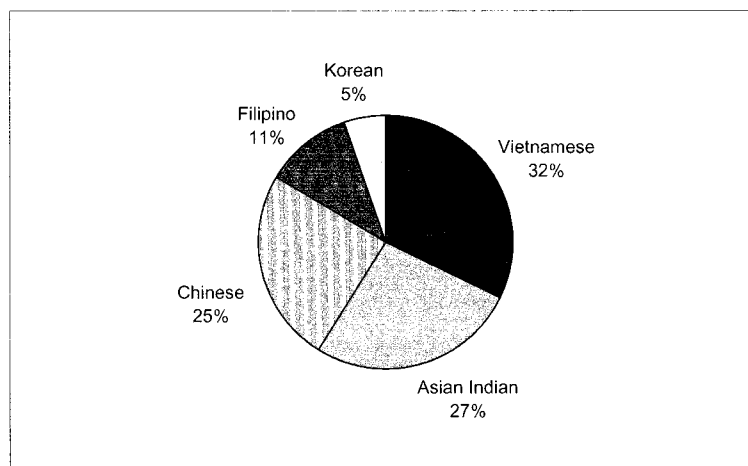
and four and one-half million in the metropolitan region. According to the 2000 United States Census, the Asian population in Houston has increased 67.2% in the last ten years. Over 218,000 Asian Americans live in Houston, comprising more than 5% of the city's population. The Texas State Data Center at Texas A&M University estimates that between 1990 and 2000, the population of Harris County in which Houston is located grew by 17.8%. Analyzed by race or ethnicity, the data include a 1.2% decline in the Anglo population, a 10% increase in the African American population, a 58.4% increase in the Hispanic population, and 81.3% increase for the "Other" category, a large proportion of which is Asian. According to the Texas State Data Center, the five largest Asian populations in Houston are: Vietnamese, 60,998; Asian Indian, 50,046; Chinese,

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‡ Currently, lead librarian, Veteran's Affairs Medical Center, Houston, Texas.

Figure 1
Asian population in the Houston area



46,841; Filipino, 21,034; and Korean, 9,827 (Figure 1) [1].

A distinguishing feature of Houston's Asian community is its newness. A study of Houston's ethnic communities by Klineberg of Rice University in 1996 found that 90% of Asians surveyed were born outside the United States, compared to 55% of Hispanics, 6% of African Americans, and 4% of Anglos. Additionally, 74% of the Asians surveyed grew up in their native lands, arriving in Houston as adults [2].

The varying circumstances under which Houston's Asian immigrants arrive in the United States make the city's Asian-American community one that is both complex and diverse, encompassing as it does several languages and cultures. Many Chinese came as immigrants, seeking better lives through career or educational opportunities, while most Vietnamese, Cambodians, and Laotians came as refugees, fleeing political and religious persecution. This diversity has implications for health education and behavioral intervention efforts, as mature adults tend to acculturate more slowly and tend to adhere more to traditional beliefs and practices relating to health [3]. Local surveys by the Asian American Health Coalition, which was founded in Houston in 1994, showed that significant proportions of respondents reported that they only visited non-Western doctors and often used alternative medicines to treat various ailments and health conditions [4]. A 1997 focus group conducted by the Houston-based Asian American Diabetes Education project indicated that respondents had very low awareness of basic preventive health practices. For example, 14% of the Chinese women and 25% of the Vietnamese women surveyed had never had a pap smear, and more than 70% of these women had never

had a mammogram [5]. The Asian American Diabetes Education Project found that most Houston Asian immigrants find medical and health information through ethnic radio programming, ethnic newspapers, and community-based organizations [6].

Many Asian Americans have found a clash of cultures when trying to fit into mainstream Western medicine, as illustrated in a moving account of an Asian family's negative experiences with Western medicine in Fadiman's book, *The Spirit Catches You and You Fall Down*. This book is a true account of a Hmong child and her parents' encounters with U.S. health professionals after the child is diagnosed with epilepsy [7].

In this paper, the authors will discuss the Consumer Health Information for Asians (CHIA) project, a collaborative effort of the Asian American Health Coalition, the City of Houston (a City Council member's office and the Department of Health and Human Services), Harris County Public Health and Environmental Services, Harris County Hospital District, Friends of the Texas Medical Center (TMC) Library, and the Houston Academy of Medicine-Texas Medical Center (HAM-TMC) Library. This project has succeeded not only in providing consumer health information to an underserved population but also in bringing together a diverse group of private and governmental agencies and institutions. One of the strengths of the CHIA project has been the diversity of the committee members, a group that includes a former refugee from Vietnam, an immigrant from Hong Kong, a number of U.S.-born Chinese Americans, native-born Americans not of Asian descent, and an immigrant from Mexico who attained her U.S. citizenship early in 2002. All com-

mittee members are either health professionals or librarians.

PLANNING

In May of 2000, the Friends of the TMC Library Board proposed as part of their outreach efforts to work with the staff of the HAM-TMC Library on a pilot project to provide health information to the growing Asian population of Houston and Harris County. This project was the brainchild of a Friends of the TMC Library Board member and the project manager of the Asian American Diabetes Project of the Harris County Hospital District, both of whom served on the Board of the Asian American Health Coalition. A presentation was made to the Friends of the TMC Library Board at one of their regularly scheduled meetings. The board agreed to offer financial support after an advisory committee studied what the project should encompass and established a start-up budget.

The board chose to support an outreach project aimed at the Asian-immigrant community rather than the more prominent Hispanic community for two main reasons. First, health information resources for Spanish speakers were much more plentiful than for Asians. Second, this project came with the support of many groups including the Houston City Council and the Harris County Hospital District. Both the Friends of the TMC Library and the advisory committee agreed that if this project was successful and additional funds could be raised, it could be duplicated in Asian communities not covered in the pilot project as well as in the Hispanic community.

The first meeting of the committee was held in June 2000 and included representatives from each the agencies listed above. This meeting served as a brainstorming session, during which the committee established the following goals:

- identifying major health concerns of the Asian community of Houston
- locating health brochures, pamphlets, or both on these health concerns
- translating the brochures and pamphlets to Mandarin Chinese and Vietnamese, the two prominent languages spoken by the Houston Asian population
- placing kiosks with the translated brochures in various facilities that serve predominantly Asian clientele
- planning project publicity
- developing evaluation mechanisms

The first goal was relatively easy to accomplish, because many of the committee members, as health professionals, had been working with health issues of the Asian community for many years. These committee members' expertise in and history of outreach to the Asian community, in conjunction with the information gathered in the 1997 focus group study conducted by the Asian American Diabetes Project [8], served as the

Figure 2
Health topics

Abuse	Hepatitis B: kids
Adult immunizations	Hepatitis B: teens
Asian food pyramid	Human immunodeficiency virus (HIV)
Asthma	Hypo/hyperglycemia
Chicken pox	Immunizations
Chlamydia	Influenza
Dental appointments	Measles/mumps
Diphtheria/tetanus	Mother and baby health
Good food for kids	Nicotine/smoking
Harris County Hospital District	Nutrition for mature adults
Hepatitis A: general	Polio
Hepatitis B: general	Tuberculosis
Hepatitis B: babies	

basis for the selection of the initial twenty-five topics. All committee members agreed that this list was not exhaustive, and additional topics would be added in the future. As the list developed, it became evident that health concerns included not only diseases or illnesses but also such issues as smoking and the services of the local hospital district. The initial list of health topics can be found in Figure 2.

For management purposes, the committee agreed that the same brochures should be provided in both Chinese and Vietnamese, making it easier to keep track of the available brochures. The next step, procuring brochures in both Chinese and Vietnamese, proved to be much more difficult. To save the cost of translating English language brochures, the HAM-TMC Library consumer health librarian spent many hours searching for existing brochures in both target languages, surfing the Internet, and contacting agencies throughout the country, in some cases the world, to no avail. It soon became apparent that such brochures did not exist, so the committee decided to locate brochures in English and have them translated into Vietnamese and Chinese.

Toward the end of this process, the consumer health librarian began searching English-language Web pages produced by the federal government, especially the MEDLINEplus site created by the National Library of Medicine (NLM). The consumer health librarian asked NLM staff about the possibility of translating the MEDLINEplus information and making it available locally in paper format. The response was favorable, especially if the translated brochures eventually would be made available outside the Houston area.

In this era of electronic resources, some may find it odd that the CHIA partners decided to provide information in paper format. The reasoning behind this decision is that a majority of Asian immigrants come to this country as adults, and significant numbers are now elderly. The Digital Divide is a reality for the older population, even if young Asians born of these immigrants tend to be computer literate. Not having access to computers and not knowing how to use a com-

puter, if one is available, create barriers for this population, a population that needs health information the most. Digitizing the brochures to make them more universally available is part of phase two of the project.

FUNDING

This decision to translate existing English-language documents proved to be the most expensive budget item for the project. The cost of translation was thirty cents a word. To ensure that no incorrect information was included in the translation, each brochure was proofed by a health professional fluent in Vietnamese or Chinese. The importance of this check is illustrated by a lesson learned during a previous project sponsored by the Harris County Hospital District. A brochure on stomach ulcers sent for translation was returned using the Vietnamese word for skin ulcers.

The initial project budget presented to the Friends of the TMC Library included \$12,000 to cover purchase of the kiosks, translation costs, and photocopying of the first set of brochures. The Friends of the TMC Library raised the initial \$12,000 through dues and a biannual fund-raising dinner. Knowing that the project would need additional funding, the Friends of the TMC Library looked at other funding sources, especially local foundations. In the fall of 2001, the Houston-based Burlington Foundation awarded \$20,000 to support the project.

A third fundraiser for the project was organized by a prominent local Asian American attorney, who arranged for a local branch of an internationally known boutique to host a fashion show and cocktail party with proceeds going to the CHIA project. Funds from the Burlington Foundation and the boutique fashion show and cocktail party will be used to bring the project to the next step, which includes increasing the number of provided topics and expanding to other languages (see below for further discussion).

IMPLEMENTATION

Because the nonlibrarian committee members were all active in the Asian community, their expertise was used to identify sites for the kiosks. The majority of Chinese and Vietnamese immigrants in Houston resided in the community of Alief on the far west side of the city, and so most of the kiosks were located in this area. In the past, much community outreach has been directed to Asian Christian churches, which tended to be more connected to the mainstream community, but the committee was not aware of any previous outreach efforts to the traditional Asian temples. Kiosks were placed in both a Chinese temple and a Vietnamese temple in the Alief area, while another was placed in a Vietnamese temple near downtown. These temples

had a more organized infrastructure for public education outreach than their counterparts in the Houston area. Future sites could target Asian populations in other areas of Houston, such as the Korean community centered in the northwestern part of the city.

Initial project sites were:

■ **Chinese Community Center§:** The mission of the Chinese Community Center (CCC) is to enhance the lives of individuals through cultural, educational, and social services. CCC is a family-centered community service organization, with a primary goal to assist new immigrants in their transition into the community through social, economic, and cultural adjustments.

■ **Hong Kong Market:** The Hong Kong Market is a large, new strip mall located in Alief. The mall houses a large Asian grocery store, a food court, numerous small family restaurants, hair and nail salons, an Asian music store, an Asian fabric store, and more. The market is a central area where most Asian Houstonians, and now many CHIA committee members, do much of their shopping. The kiosks are placed outside the grocery store and in the food court. This is the only site where brochures in both languages were placed.

■ **Indochinese Community Center:** Established through donations from the community, this center houses cassettes, newspapers, magazines, and books on the Indochinese cultures of Vietnam, Laos, and Cambodia. Located in China Town, near downtown Houston, the center offers classes in English as a second language, general equivalency diplomas (GED) for refugees, and technical skills training. It also houses an active refugee program.

■ **Rainbow Village:** This Department of Housing and Urban Development-sponsored housing facility is the first in the Houston area for elderly Asian immigrants. Built in 1998, Rainbow Villages has seventy-eight units housing 110 residents. All residents must be over sixty-two years of age and have to be able to live independently. More than 200 applicants are on the waiting list for housing in the facility.

■ **Tzu Chi Buddhist Temple:** Part of the international Buddhist Compassion Relief Tzu Chi Foundation, the temple is a community center offering Chinese language classes, activities for both residents of the Rainbow Village as well as other Asian organizations, a library, a temple, and a large community hall for big events.

■ **Vietnam Buddhist Temple:** This temple provides similar services as the Tzu Chi Buddhist Temple to Vietnamese refugees.

■ **Willowmeadow Apartments:** This low-income apartment complex acts as a village with links to so-

§ The Chinese Community Center's Website may be viewed at <http://www.ccchouston.org>.

cial service providers. The clientele are primarily Vietnamese.

Additionally, each site was chosen because of the initial enthusiasm of the staff at the site. When contacted, these staff members were willing to make health information available to their clients and customers. Without their continued enthusiasm, there was a greater chance that the project would fail, which has been the case with the Vietnam Buddhist Temple.

The kiosks and first batch of brochures were delivered to the sites by project participants. A suggestion box is attached to the top of each kiosk, so that anyone who takes brochures can make suggestions, such as other health topics to be included in future translations. Each site has a local person who contacts the consumer health librarian when the kiosks need to be restocked. This procedure has worked well for all the sites except the Hong Kong Market, where the largest number of brochures have been distributed. The market has proved to be a bigger challenge, because the brochures are taken very quickly, and the mall management is too busy with daily duties to make the kiosks a priority. Committee members often find the kiosks empty during casual visits to the market.

PUBLICITY

Part of the initial project process included planning a press conference and ribbon cutting ceremony at the Hong Kong Market to introduce the kiosks to the community. The ceremony was held on November 14, 2000. A member of the Houston City Council was asked to speak, as were directors of many of the participating institutions. Attendees included prominent members of the Asian community, representatives of the Asian media, Friends of the TMC Library Board, staff from the participating institutions, and the local ABC television affiliate, which gave the project a thirty-second segment during prime-time news the next evening.

The CHIA project was also the subject of a poster presented at annual meetings of three library associations: the Medical Library Association (MLA) in Orlando, Florida; International Federation of Library Associations and Institutions (IFLA) in Boston, Massachusetts; and the Midcontinental, South Central, and Southern Chapters of MLA Triple Chapter Meeting in New Orleans, Louisiana. During each presentation, librarians from all over the country, and the world in the case of IFLA, commented on their growing Asian populations and the need for health information in Asian languages.

CHIA committee members have also been asked to speak to Houston-area groups such as the Harris County Medical Society's Council of International Medical Societies. Local publicity was also provided through the fundraising event at the boutique. This

event was attended by more than 200 prominent Houstonians, including Denton Cooley, M.D., the renowned heart surgeon, and many well-known Asian attorneys. The morning anchor from the local NBC television affiliate served as the emcee for the evening, and she provided a good description of the project and spoke of the need for more outreach to the Asian community.

LONGTERM GOALS

Despite being set back by flooding of the HAM-TMC Library caused by Tropical Storm Allison in June 2001, by fall 2001 the CHIA team was ready to move the project to the next phase. In November 2001, the project fortuitously received the funding from the Burlington Foundation and from the fundraising event at the boutique, as the funding by the Friends of the TMC Library had run out at the time of the flood.

Phase two of the project will include digitizing the already translated brochures and making them available through the HAM-TMC Library's consumer health Web page, Houston HealthWays.** This part of the project was put on hold because the flood totally destroyed the street level of the library, where most of the library's servers, scanners, and peripheral computer equipment were housed. Once the brochures are on the Web, anyone with Internet access will be able to benefit from the project. The paper copies will continue to be distributed to the technologically challenged. Digitization of the existing documents should be completed winter of 2002.

Once the brochures are digitized, the Burlington grant and boutique funds will be used to purchase two touch-screen computer kiosks to house the information. These kiosks will be placed in strategic sites, such as the Hong Kong Market or branches of the Houston Public Library in the target neighborhoods. Also during phase two, additional health topics will be identified, and brochures will be translated if necessary. The committee has discussed using focus groups of consumers and health professionals to determine if another Asian language should be added to the group of target languages. Currently, the committee is meeting with Korean health professionals and community leaders to ascertain the needs in that community.

Project plans for phase three include placing additional touch screen information kiosks at sites where only paper kiosks exist or placing them in other locations throughout the city and county. Additionally, the committee will use grant funding to train local bilingual health professionals to teach health information classes in the Asian communities.

Plans for phase four include beginning duplicating

** The Houston HealthWays Website may be viewed at <http://hhw.library.tmc.edu>.

the project in the Hispanic community. Because a high percentage of residents of Houston and Harris County speak only Spanish, resources in this additional language will benefit a large population.

EVALUATION

Because no CHIA staff are housed at the facilities where the kiosks are housed, the degree of success during phase one has primarily been inferred from the restocking of the brochures. In the Hong Kong Market, where the traffic is constant, the kiosks must be restocked approximately every three weeks with seventy-five copies of all twenty-five topics in both Chinese and Vietnamese. On the other hand, the brochures move much more slowly at Rainbow Village, which has a stable population of senior citizen residents. In most cases, someone at each site either calls or faxes a preprinted request form to order a new supply of brochures. Each kiosk also has a suggestion box on top where those taking brochures are invited to make suggestions on the program, the kiosk, additional topics, and so on. The suggestion box has been less than successful, though, because people seem to take the cards and golf pencils for other needs.

Not all the kiosks have been successful. While the kiosk at the Tzu Chi Buddhist Temple seems to be an important part of the services the temple offers its constituents, the kiosk at the Vietnam Buddhist Temple, placed outside one of the main buildings, appears to have been forgotten. The committee will assess the placement of this kiosk, and, if the monks of the temple do not agree to move it to a more visible indoor location, it will be moved to another Vietnamese site. Finally, while the brochures at the Rainbow Village seemed very popular at the beginning, interest seems to have lessened. The committee hopes the introduction of new health topics and the implementation of health classes in Chinese as planned in phase three of the project will create renewed interest. If the kiosk at the Rainbow Village proves to have served its purpose, it too will be moved to a more active site.

Future plans include "convenience sampling" by placing native-speaking volunteers near the kiosks to do quick interviews with people stopping by to browse or pick up brochures. The survey will be care-

fully developed, but the sample group will not be controlled. The interviewers will ask questions such as:

- Have you used the kiosk before?
- If yes, what was most useful?
- What additional information would you like to see?
- How do you prefer to get good health information?

Additionally, there will be some pre- and posttesting by the native-speaking instructors, when the community classes are developed.

CONCLUSION

In eighteen months, CHIA has achieved some success in providing health information to Houston's Asian communities. Much of the project's strength has come from the diversity of project partners and the enthusiasm each brings to the committee. Based on the achievements to date, additional funds will be raised, and the project will be duplicated in other communities, both Asian and Hispanic.

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